10. *Extract of Bullock's Blood.*—Dr. Mauthner, who introduced this remedy, writes to Dr. Behrend as follows: "I now give it to children in larger doses than formerly, to the extent of half an ounce in the day, dissolved in water. In many anæmic states, the favourable result is so striking that the parents, perceiving the improvement of their child, generally desire the continuance of the agent. In these larger doses, it is true, the drug colours the dejections of a brown hue, but it does not give rise to the least dyspeptic symptom. It has never caused emesis, and, if the child has shown some dislike to it at first, it takes it afterwards with great avidity. Children who were in the extreme stage of exhaustion, whose stomachs were so irritable that milk and beef-tea or broth were rejected by them, and cod-liver oil could not be in the least retained, bore the extract of ox-blood well, and throve admirably." Here, in Berlin [Mauthner is at Vienna], the extractum sanguinis bovini is given with very good effect to chlorotic and emaciated girls, and even to phthisical adults. A colleague has found it very efficacious in rachitis.—*Journ. fur Kinderkrankheiten.*

11. *Decoction of Olive Leaves in Intermittent Fever.*—Mr. Maltas states (*Pharmaceutical Journal*) that he was in the island of Mytilene at a time when fever and ague of the worst description was raging in the island; in fact, it was so bad, that death ensued frequently after a week or ten days. The small quantity of quinia at the druggists' was soon exhausted, and he could procure none to administer to patients. Knowing that *biberine* and *salicine* were often used for fever and ague, he turned over in his mind all the bitters he could think which might prove effectual. Many were poisonous, and he rejected them; then thought of *olive leaves*, and after several trials, he commenced administering doses of a decoction of the leaves—say two handfuls boiled in a quart of water till evaporation had reduced it to a pint. This he gave in doses of a wineglassful every three or four hours. Obstinate cases of fever gave way before it, and for many years he has found it more effectual than quinia.

MEDICAL PATHOLOGY AND THERAPEUTICS, AND PRACTICAL MEDICINE.

12. *Curability of Tubercular Meningitis.* By H. Hahn.—This disease has been too generally regarded as an incurable malady. A child affected with tuberculous meningitis is a child nearly as much condemned in the sight of the parents as in that of physicians. Nevertheless, such an idea, as cheerless as it is false, is a great misfortune, for it depresses courage, paralyzes energy, and scarcely permits the evil to be combated with through the more efficacious measures. The defeat, too, seems to have nothing humiliating about it, since it is regarded as a necessity. The prejudice which attributes the character of incurability to tuberculous meningitis, only serves the purpose of shackling the progress of medical art. But we have sufficiently cleared up this question in the fourth chapter, and we have there shown that the disease is, in a very great number of cases, susceptible of cure.—*De la Méningite Tuberculeuse.*

13. *On Tuberculosis in Egypt.*—In 363 dissections at Cairo, by Prof. Griesinger, there was tubercle in 62 (17 per cent.), but as in 12 it was very trifling and obsolete, it should be said that there was recent tubercle in 50 (13.8 per cent.). (In Stuttgardt and Prague the proportions are, according to Cless and Dittrich, whose observations are referred to for comparative data, 36—37 per cent. in both places.) It was less common in old persons; its greatest frequency was between the ages of 15 and 20; but in general terms it may be said to have been nearly the same between 7 and 40 years. Among the 363 dissections in the hospital were 333 Fellahs and ten Negroes; the proportion of tubercle was only 11.11 per cent. among the former, and no less than 50 per cent among the latter. Dr. Griesinger remarks that the disposition of Negroes

to tubercle, so common in cold climates, begins already in Egypt. With respect to the implication of particular organs—the lungs were unaffected in one case in which there was tuberculous meningitis; in all other cases they suffered. In 33 cases the disease was confined to the lungs and its appurtenances (pleura and bronchial glands); in 10 cases the lung disease was about equally advanced with disease of other organs; in 6 cases the disease was very trifling in the lungs, but was advanced elsewhere.

The amount of disease in the lung appeared less than in phthisical cases in Europe; the lower lobes alone were attacked in four cases, the extreme apices of the lungs appeared to be spared often, and the tubercle was found about the height of the second or third rib.

In 4 of these 50 tuberculous cases there was pericarditis (not apparently with tuberculous deposit at that point). The peritoneum was tuberculous in 14 cases (28 per cent., whereas in Cless's cases it was affected only in 13 per cent., and in Dittrich's in 7 per cent.). The small intestines were affected 23 times=46 per cent. (in Cless's cases 54 per cent.); the large intestines were affected in 6 cases=12 per cent. (in Cless's cases 24 per cent.). The intestines were thus altogether affected in 50 per cent., while Cless's numbers are 78 per cent., and Dittrich's 72. The mesenteric glands were affected in 22 cases=44 per cent. (in Cless's cases 25 per cent.); the liver was tuberculous in 9 cases=18 per cent. (in Cless's cases only 1 per cent.); the spleen was affected in 23 cases (46 per cent.), and between the ages of 7 and 30 this organ was affected in no less than 87 per cent.; in Europe, the frequency of spleen tubercle is much below this; the kidneys were affected 12 times (in 4 cases very greatly); this number is also much higher than in Europe; thus in Egypt in 24 per cent., in Cless's cases 4 per cent., in Louis's 2 per cent. In 3 cases there was tuberculous meningitis, in 2 cases tubercle in the brain. The following is the order in which the organs were attacked: lungs, bronchial glands, spleen, small intestines, peritoneum, pleura, kidneys, mesenteric glands, liver, large intestines, pia mater, brain.

Dr. Griesinger then remarks that tuberculosis generally, and phthisis pulmonalis in particular, are far less common in Egypt than in Mid-Europe; the causes of this are, perhaps, the mild climate, the mode of occupation, which is never hardly sedentary, and the infrequency of bronchitis and inflammatory affections of the lungs. The investigations show also the relative infrequency of tuberculosis in children; while, on the other hand, the extremely frequent implication of the mesenteric glands, peritoneum, liver, spleen, and kidneys, makes the tuberculosis of adults in Egypt approach, as far as organs are concerned, the tuberculosis of children in Mid-Europe.

The important question whether Egypt (Cairo) is a good residence for tuberculous Europeans, is answered by Dr. Griesinger in the affirmative, and cases are referred to in which the disease was decidedly arrested. Nevertheless, the disease should be in an early stage, and without bowel implication, as dysentery is very apt to ally itself to it. The patients should arrive in October in Alexandria; should go to Cairo in November, and there remain, or go to Upper Egypt or Nubia. In March, or at the beginning of April, they should leave Egypt, and go to Syria.—*Brit. and For. Medico-Chirurg. Rev.* Jan. 1854, from *Vierdodt's Archiv für Phys. Heilkunde.* Heft 3, pp. 519.

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14. *On Degeneration of the Glandular Structure of the Stomach.*—Dr. Handfield Jones very truly observes, that no one has yet done for the stomach what Johnson, Simon, and Frerichs, not to mention others, have done for the kidney. And yet the mucous membrane of the stomach is a true gland structure, with a general account of which he commences his paper. The principal lesions he has observed are: 1. An atrophic state of the lower end of the gastric follicles. 2. A fatty degeneration of the epithelium. 3. A fibrous hypertrophy of the submucous tissue. In short, the same organic alterations as occur in many other glands. The relation of these to symptoms has yet to be made out by more extensive researches, but Dr. H. Jones has the merit of commencing this inquiry, with the particulars of two cases. These died of

varions diseases, nnd nn nccount of the structnre of the mncons membrane in each is given. The paper concludes with the following passage:—

"The practical results which the nbove investigation, as far ns it has extended, supplies, are: 1. Thnt we mny expect not unfreqnently to meet with cases where the digestive power of the stomach is permanently weakened by the decay of more or less of its glandnlar structure. 2. That, in a still greater nnmber of cases, the digestive power is weakened from an ntrophy of the epithelium, which, it is conceivnble, may, by judicions administration of light, nonrishing food, cod-liver oil, nnd gentle tonics, be reproduced in n more healthy state. 3. Thnt we must be cautious in leeching or blistering the epigastrium for tbo removnl of *gastritis*, wbich may hnve no existence. The further onr observation extends, the more do we become convinced that the most hopeless diseases with which we have to contend are those depending on essentially chronic degenerations of organs. Who wonld not rather have to deal with an acute pneumonia or pericarditis, than with a case of confirmed morbus Brightii? How often does onr healing skill hang its hend in hopeless forehoding when onr diagnosis has revealed the existence of nn organic lesion? This must of course often be; bnt how needful then does it become that we should be thoronghly aware of these degenerative tendencies, nnd exercise the utmost vigilance to anticipate and stay those destructive chnnges which we are nnable to reverse."—*Assoc. Med. Journ.*

15. *On Certain Pathological States of the Blood*, nnd *of their Treatment*.—Dr. James Copland read an interesting paper on tbis subject to tbo Royal Medical and Chirurgical Society (Jan. 10, 1854). After describing the vnrions symptoms and signs of vitintion of tho blood, nnd noting more partienlnrly the different changes in tho secretions consequent on snch vitintion, tho nnthor deduced n series of inferences on which he founded his trentment. He nrranged the vitiations of tho blood nnder certain heads or categories, according to the causes, extrinsic or pathological, producing them, with reference to the indications of treatment, nnd these comprehended the following seven orders:—

1. Vitintions produced by imperfect assimilation or development of the blood-globnles.

2. Vitiations occasioned by tho increased netion of the organs, which waste or decompose the hæmto-globnlin—wbich increase the fibrin and augment the nrea.

3. Contaminations nrising from the nbsorption of pnrulent, sanious, or otber morbid matters, into the circnlation, or from the imbibition of any of these by the veins or cellulnr tissne.

4. Alterations sometimes supervening on the foregoing, or complicating the latter, snch as fibrinous coagula, or concretions, or inflammations of nrteries, velns, or lymphatics, pnriform infiltrations, or fomentations.

5. Vitiations occasioned by the imperfect performance, or by the interruption or suppression of a depurating function.

6. Contamination prodnced by morbid miasms, or by specific seminia, as in malignant, pestilential, nnd septic maladies.

7. The inocnlation of poisonous secretions or finids, as the fluids from erysipelatous inflammations, from nsthenic or diffusive inflammation, from bodies recently dead from malignant diseases, or from putrid animal matters.

The treatment appropriate to each of these orders or categories of blood vitiation might be differently estimated by different observers; the nnthor professing, however, to give only the results of his own observation and experience. His practice had been based npon n close observation, nnd upon rational inferences from snch observation. The trentment adopted by the nuthor in these various conditions was then detailed, illnstrated here and there by some very instructive cases. The anthor dwelt at some length on the treatment of that morbid state of the blood which occurred in acute rheumatism, nnd which is charaeterized by the redundancy of the fibrinous and nreal constituents of the blood. What medicines would counteract the disposition to fibrinous constituents in the blood, or such as might exist? Calomel, nnd calomel and opium, diaphoretics, emetics, purgatives, were doubtless excellent

initiatory means to diminish excrementitious plethora; but to promote the depuratory functions, he had found the greatest advantage from magnesia and its citrate, the carbonates and citrates of the fixed alkalics, the biborates of soda and potass, the nitrate and chlorate of potass, sublimed and precipitated sulphur, &c. &c., as well as the various preparations of cinchona and turpentine. For the treatment of the sixth category, the advantages derived from large doses of turpentine were detailed; and the author concluded by expressing his hopes that he should be excused for having made so frequent reference to his own writings, where many of the matters comprised in this extensive subject were more fully discussed; but he had his own originality in some topics to vindicate, as several authors who had recently written, had considered that opinions and ideas were fair objects of plunder, if they could be conveyed away without reference to their originators, and in a different array of words.

16. *Treatment of Cholera.*—Messrs. Pearse and Marston, in an interesting account (*Med. Times and Gaz.* Feb. 25, 1854) of the cases of cholera treated at the Newcastle Dispensary in 1853, make the following remarks on the treatment of that disease:—

Every one is aware of the conflicting statements made on this head; we believe that there are many cases in which the stages are so rapid, the collapse so intense and speedy, that all remedies with which we are at present acquainted, are utterly impotent. Many of the discrepancies appear to have arisen from the fact that the same remedies have been tried by different men, in different stages and periods of the epidemic; thus, at first, the cases are generally of marked malignancy, and least amenable to treatment; while towards the close, or with some sporadic cases, it is much less so, and the remedies have obtained the credit which belonged rather to a debilitated virus. During the premonitory stage of rice-water purging, without any marked tendency to collapse, we relied upon calomel and opium, in small and frequent doses; if vomiting also existed, we gave the albumen mixture (hereafter referred to). The treatment of cholera, from the pathology, would appear to comprehend—

1. The elimination or chemical alteration of the virus.
2. Antagonizing the effects of the disease.

First By supporting the nervous system.

Secondly. Restoring, as far as practicable, the normal condition of the blood, and reinstituting glandular function.

In the reactionary stage—consecutive fever—

1. To restore the functions of the kidney and skin.
2. To treat local symptoms, particularly the cerebral affections.

During quite the first period of the epidemic, we gave brandy, and pills composed of calomel half a grain, opium and capsicum, of each, one-eighth of a grain, every half hour, with comparatively little success, except in quits the premonitory stage. By degrees, as we better understood the epidemic, we recognized the fact that the incessant vomiting prevented any remedies being assimilated, and that a large number of cases, during collapse, presented that restless condition before described; and, during the reactionary stage, had the most marked head symptoms; and we noticed, further, that in these cases opium had been given largely or very frequently, and that in these the symptoms were decidedly the worst.

If we were asked, what practical facts we had learned during the epidemic, we should reply, Three:—

1. To give as much, and only that quantity (be it ever so small), which the stomach could retain.
2. Not to give opium at all during collapse or consecutive fever.
3. Never to allow the patient to rise from his bed at all, even raise his head from the pillow, nor to allow him to take any nourishment in large quantities.

As we have before stated, the incessant vomiting was a fatal prognostic. Undoubtedly the system requires, and the patient anxiously solicits water, but they always vomited it immediately; and, remembering Dr. Hunter's admirable

common-sense views upon this head, we determined to try our patients with very small doses of liquids, to see whether any—and, if any, what—quantity was retained, and we found almost invariably that half a teaspoonful of liquid every five minutes was retained, and that by degrees it could be increased to a tablespoonful; but if any more, or anything else than the medicine recommended, were given, immediate vomiting was produced, with great prostration, and, too frequently, death. We would particularly desire that this fact should be the basis upon which we ground the success of our treatment in many cases. With regard to opium, its baneful influence was early detected by us all, and the fatality which marked those cases of a restless state of collapse was nearly allied to, if not to be attributed to, the effect of opium.

If, as we believe, death in consecutive fever is intimately connected with poisoning by urea, it can be readily understood that opium would be decidedly injurious, increasing greatly the cerebral congestion, and co-operating decidedly with the retained urea in causing death by narcotism.

We have notes of a great number of cases which were apparently doing well in every respect, but the patients anxiously desired to rise, which some of them did, from the bed entirely; others merely sat up and conversed. In all these cases, sudden death resulted apparently from syncope.

If patients were treated in an hospital, it would be well worth considering whether it would not be advisable to secure the horizontal posture by a strap over the chest, lightly affixed to the bedstead; many lives, we feel assured, might be preserved. Among, also, the many causes of failure, we must notice the injurious effect which the reception of solid food, or too large a quantity of liquid, into the stomach produced. In many cases it was instantly rejected by vomiting; in others, a return of the purging; and in all it was injurious, producing frequently tenesmus, often great pain in the head, and sometimes syncope. It is probable that the enteric mucous membrane is comparatively denuded of epithelium, and that, during recovery, it is lined by very imperfectly developed cells, while the sympathetic centres remain in a state of morbid irritation; however it may be, the contact of solid food, or any error in diet, was a most frequent cause of relapse; operating upon the system sometimes almost like a shock. The treatment that we adopted was a modification of that recommended by Professor A. Buchanan, of Glasgow, who pointedly remarks: "The natural processes by which a spontaneous recovery from cholera is effected are chiefly by the reabsorption of serum, and the absorption of fluids, &c. The study of these natural processes is of the highest importance, that our artificial treatment may be adapted to promote them, or at least may offer no impediment to their progress." We gave half a grain of calomel every twenty minutes or half hour, and one or two teaspoonsful of the following mixture every five or ten minutes, according to the quantity capable of being retained; at the same time excluding water, if it produced vomiting:—

℞. Vitelli ovi ℥xij, aquæ ℥xvj, spt. vini gallici ℥ij, potass. nitratis ʒij. M.

This mixture we invariably found was retained after a short period, and was exceedingly pleasant and grateful to the patient; at the same time, we used counter-irritation freely, in the shape of sinapisms to the epigastrium. So soon as there was evidence of the action of the liver, or the stage of collapse was passed, we gradually diminished the calomel, and persevered in the albumen mixture, the brandy being now entirely withdrawn, until the action of the kidneys was fully restored, combating the local cerebral symptoms by removal of the hair, the application of cold to the head, and counter-irritation.

We can confidently state, that as much success may be anticipated from this as from any known treatment, and we found it very far superior to any other.

As calomel is the remedy which has gained the greatest repute in this disease, and as it appears to have the power of producing some elemental change in the constituents of the blood, we conceive that in administering it we were most likely (however empirically) to meet the first indication. We considered, also, that the "albumen mixture" was far better calculated to meet all the indications than any combination we knew of, by diluting the blood with a fluid as nearly like serum as any artificial production could be. The nitrate of potass having the power of dissolving fibrin and reddening the clot of venous blood, it

might hove somo beneficial action; nnd by far the best dinretic we knew of was as speedy n dilution of the hlood as prncticahle, with saline solutions, nnd restoring its alhnmen.

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17. *Nitrate of Potash in Rheumatism.*—Dr. Richarn Rowland has instituted some clinical experiments, with e view of ascertaining the comparative vnlne of several remedies in the cure of rheumatism. The first nrticle selected wos the nitrnte of potash. The questions which he desired to determine were:—

1. Has the nitrnte of potash nny considerahle power in the cure of rheumotism? 2. Is there more danger of heort-diseaso occnrring under its employment thon in other methods of treotment? 3. In whot form of rheumatism is the remedy most applicable? 4. Is there any prcliminory manegement required to insure its favonrahle action? 5. What is the minimum dose necessary to ohtain beneficial resnlts? 6. Are evil consequences to he nppreheended from its contlnned employment in considerahle nmonnt?

In n clinical lectnre (*Lancet*, February 11, 1854), Dr. R. presents a summary of thirteen cases of rheumotism in which he tried this remedy, and gives the following as the conclusions at which he has errived:—

"From n summnry of these cases, it nppears that the nverage duration of the neute symptoms, nfter the commencement of the trentment, was ohout eight dnys. In three cases, the rhenmntism disnppeared before the seventh day. In one, it was protrocted to the eighteenth. Bnt most of the patients had the complnint some doys hefore their odmission to the hospital, and sometimes it wos not possihle to obtain precise informntion as to the dete of the eeizure; hnt, so far ns this conld he determined, the whole nverege period of the neute cases nppeared to be nhont sixteen days.

"Tnking the results from the most nnfnvonrable aspect, it mnst still he ndmitted thot they support the opinion of the efficacy of the nitrate of potash in rheumatism. In some of the cases, the relief followed its exhihition almost immediotely, and the improvement was rnrely delayed for ony considerohle period. Besides the very ohvions advantnge of removing e complnint so painful as rheumntism ns speedily as possihle, it is otherwise important to lessen its dnration, and especially hecanse it diminishes the chances of those frightful complications which may nttend the disease nt every stage of its conrse.

"In no instance was there even threatening of vnlvnlar disease. The condition of the hcnrt was carefully watched nt each visit, nnd in all the potients it preserved its natural sounds nnd rhythm. This scrutiny wos olways repeated before each patient left the hospital, nnd with similar negative results. It is true that in two instances (N—— and P——) the endocardial murmnr existed; but, in both these patients, the complication did not commence in the hospitnl. N—— had an acnte nttack of rheumatism, in which the nitrate was prescrihed with complete success, no vestige of henrt affection being present on her dismissal. But, n fortnight ofterwards, she was brought to ns ogoin, having had a relapse of the complaint, and now n loud systolic murmur was immediotely detected. In P——, the heart was hopelessly injnred previous to his admission. These cases cannot be, therefore, set down as evidence egninst the utility of the nitrate of potash in rhenmatism. At the snme time, the nnmher of exnmples is far too few to establish the prohnhility of immunity from heart complication under this treatment. It can only be soid thot nothing of the kind occurred in these patients.

"With regard to the form of the disease in which the eolt is most likely to prove heneficial, the testimony derived from the cases now cited decidedly shows thnt its efficecy is most remarkahle in ncute rheumatism; end it might almost be said that the heneficial result was the more striking in proportion to the activity of the ottack. When snhacnte rheumotism supervened upon the chronic, nlthough the nitrate was commonly efficient in removing the former, it seemed to exercise no influence over the latter. So invariohly was this observed, thnt I have ceased to prescrihe this medicine in purely chronic enses. Pains of a gouty tendency, and the capsular variety of rheumatism, appear to he equnlly irremediahle hy this means. No preliminary treatment was ndopted, hut the snlt was nlmost invariahly commenced ot whntever period of the com-

plaint the patient happened to be on his admission. There is no reason to suppose that its influence is greater at one stage than at another. It should be stated, however, that an aperient was prescribed when it was required, and sometimes an anodyne at night, when the sufferings were so great as to prevent sleep.

It is not easy to determine the mode of action of the salt in this affection. The theory that it removes from the system a supposed redundance of the lithates and lithic acid can hardly be sustained. Not only was there no marked acidity of the urine in several of the patients, but in two of them it was strongly alkaline, and in one loaded with phosphates. Even during the continuance of the nitrate, the urine regained its property of slightly reddening litmus-paper. Nor was there any sustained sensible action either on the bowels, skin, or kidneys. Purging never once occurred. In a few cases, the perspiration was occasionally increased, but by no means continuously; and, bearing in mind the tendency to copious sweating in rheumatism, it might be questioned whether the salt does not exert an influence in moderating, rather than augmenting, the cutaneous discharges. The urinary secretion was increased more frequently, and rather more permanently, but the diuresis was never very remarkable. Whether the salt possesses any action on the fibrin of the blood, these observations do not enable me to determine, but the symptoms and aspect of some of the patients scarcely warranted the idea that there was an excess of that ingredient in the circulating mass.

"The dose of the nitrate never exceeded half an ounce, and it was sometimes limited to three drachms daily; it was dissolved in a pint of water, the patient being directed to take the whole in twenty-four hours. This is a much smaller quantity of the salt than it has been recommended to employ for the cure of rheumatism; but there is a manifest advantage in prescribing it in as small a dose as will answer the purpose, for there will be less danger of its producing gastric or renal irritation; and, when two or three ounces are given daily, a large quantity of fluid is required for the necessary dilution, and this circumstance alone would render the remedy too disgusting to admit of its general adoption. No injurious consequences arose in any instance from the exhibition of the medicine, nor was there any complaint made by the patients of the disagreeableness of the remedy, or of any inconvenience arising from its use. There may be an apparent exception to this fact in the patient W——, who complained of dysuria when undergoing treatment with the nitrate. But, as this symptom continued although the medicine was withdrawn, and subsided after it had been again prescribed, it is hardly probable that the irritation had been occasioned by it in the first instance."

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18. *Cerebral Complications in Acute Articular Rheumatism.* By Vigla.—These important complications have been hitherto mostly overlooked in pathological treatises. They are not, however, extremely rare, for, in three months, M. Vigla has met with five cases, two of which recovered, and three proved fatal. Out of sixty-five cases, this complication was observed in the proportion of one in thirteen. The cerebral affection is perhaps the most important and dangerous complication in rheumatic fever. It varies, however, in character and intensity in different cases. The different kinds have been classified as follows by M. Vigla:—

1. Simple delirium, similar to the sympathetic or nervous delirium which occurs in many acute febrile diseases, whether of idiopathic or traumatic origin; in short, *rheumatism complicated with delirium.*

2. Delirium, accompanied by most of the symptoms, and probably also the lesions of meningitis, or the *rheumatic meningitis* of authors.

3. Sudden and unexpected ataxic condition, quickly succeeded by fatal collapse or coma, the *rheumatic apoplexy* of Stoll and some other authors.—*Archives Gén. de Méd.*

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19. *Cases Illustrative of the Effects and Manner of Action of Particular Remedies in Diabetes.*—Dr. W. R. Basham has published (*Lancet*, Nos. for Jan. 21 and 28, 1854) five cases of diabetes, to illustrate the effects of some remedies recently

suggested for diabetes. The principle upon which the several remedies were employed rests on the opinion that diabetes is a disorder of the digestive and assimilative functions, in which the power of conversion and appropriation of the farinaceous and amylaceous elements of food is singularly perverted and disturbed. These alimentory principles are more rapidly converted into sugar or glucose than in healthy digestion; immediate absorption by the venous capillaries of the stomach follows, the further stages of oxidation are abruptly arrested, and the glucose, quickly passing into the circulation, is, without further metamorphosis, excreted by the kidneys. I postpone, also, to another opportunity, any reference to the interesting question, whether all the sugar passed by diabetic patients is solely derived from vegetable food, or whether the tissues of the organism, as well as the nitrogenous elements of animal food, may not also contribute to the formation of the large amount of saccharine matter excreted in glucosuria. The regimen in the following cases consisted in diminishing, as far as possible, the supply of vegetable material containing fecula or starch, the mass of nutriment being derived from the nitrogenous class of aliments. The medicinal remedies may be classed as follows, the more novel ones being placed first:—

1. The permanganate of potoss, hypothetically to supply the stomach with an increased amount of oxygen, by which the metamorphosis of the farinaceous material should be hastened forward into a higher state of oxidation than that of sugar, permanganats of potass, as is well known, out of the body, converting sugar into oxalic acid. Mr. Sampson, who first employed it, states (*Lancet*, Jan. 8, 1853) that his attention was drawn to this salt when seeking for some remedy which should give out oxygen when taken into the stomach, with the view of assisting the imperfect action of the digestive and assimilative functions. He records a case in which it appeared beneficial. We must not overlook the fact, however, that a prominent error in the digestive process of the diabetic patient is the premature and rapid conversion of the fecula of food into sugar; it is hasty and imperfect—not tedious or protracted.

2. Agents that, hypothetically, should retard and delay the formation of glucose in the stomach. Certain substances possess the property of arresting the saccharine, vinous, and acetous fomentations. If glycerin be added to a half-fermented infusion of malt, the further formation of acid is checked; and I have found that a mixture of potato-starch and dilute nitric acid undergoes chemical conversion into dextrine and glucose more slowly, and is all but arrested, if glycerin be previously mixed with the starch. Glycerin, creasote, and sulphite of soda have been tried on this principle.

3. Opium and opiates, to act on the nervous system; to diminish the excitement and irritability of the nervous centres.

4. Remedies which relieve thirst, and aid the digestive process by the supply of hydrochloric acid, and which tend indirectly to diminish the amount of fluid excreted by the kidneys, as recommended by Dr. Owen Rees. (*Medical Gazette*, vol. xl. p. 365.) Hydrochloric and some vegetable acids.

5. Diaphoretics, stimulating the palpably defective cutaneous secretion, and thus vicariously lessening the proportion of fluid to be excreted by the kidneys. Antimonials; warm baths; flannel clothing.

6. The use of alkalies, particularly ammonia; on the hypothesis of Mialhe, that the starch of food is equally converted into sugar by healthy and diabetic persons; but that in health it is metamorphosed and burnt off by the presence of alkalies, undergoing complete oxidation, and is ultimately discharged as carbonic acid from the lungs; but that in diabetes it is not oxidized, owing to the deficiency of alkalies in the blood, the sugar, without further change, passing off by the kidneys.

These several remedies have never been administered in conjunction; and if, in the same case, two or more have been tried, a day or two has been allowed to elapse, that the observations recorded might be fairly deduced from the remedy employed.

The results were as follows:—

1st. The permanganate of potass was given in two cases; during its administration, the amount of sugar excreted gradually increased, although the fluid

amount of urine became somewhat less, and the thirst appeared to be alleviated. No inconvenience attended its use; ten-grain doses were taken without any unpleasant effects on the digestive organs; indeed, it was thought that some benefit arose from it, as the fulness and ernctations, in one case, seemed relieved by it; but, during its administration, the ratio of the sugar steadily increased. This occurred equally in both cases; the symptoms of each differed but little in intensity. There was but a slight discrepancy in their several ages, and in both the disease was unaccompanied by any pulmonary complication, so that there was scarcely room for a doubt that the increased amount of oxygen supplied to the food by the permanganate of potass facilitated the formation of sugar, and did not, as hypothetically inferred, advance the chemical conversion of the glucose into the stage of acid metamorphosis. Dr. Wood, of Philadelphia, has tried yeast in diabetes, on the principle here enunciated, that, as it converts sugar out of the body into acid products, acetic and carbonic acids, it might bring about analogous changes in the stomach. On a like principle, Dr. Gray, of Glasgow, has tried rennet, which converts sugar into lactic acid.

2dly. From the operation of the agents of the second class, administered on the hypothesis of their possibly retarding the conversion of the amylaceous elements of food into sugar, we can deduce only negative results. They were tried only in one case, and, during a period of twenty-one days, the amount of sugar was only faintly diminished, the specific gravity falling from 10.44 to 10.40, the average daily amount of urine remaining the same. The case in which these remedies were tried was one of great severity, and ultimately proved fatal; yet, notwithstanding, other remedies succeeded in reducing the amount of sugar, though only temporarily. Although glycerin and sulphite of soda failed in producing any effects in this case, I am nevertheless desirous of again submitting these remedies to further trial, and testing, by the evidence of more extended observation, the fallacy or otherwise of their hypothetical agency.

3dly. *Opium and Opiates.*—These cases afford but a limited amount of evidence on the action of these agents. Opium certainly operated as a palliative; the thirst became much relieved, the amount of urine diminished, and the skin, by the presence of sudoresis, indicated a relief to its obstructed function; but the daily average amount of sugar excreted was not materially lessened, and the physical condition of the patient was not improved. Some constitutions will bear opium much better than others, and it must not be inferred, because these cases do not exhibit its agency in a more favourable light, that opium may not in other instances produce more remedial effects.

4thly. *Hydrochloric Acid.*—The action of this mineral acid appears in a favourable light in one case. It promoted the digestive function, relieved the flatulence, and probably furnished an important material to the solvent functions of the stomach. In other forms of dyspeptic derangement, its agency is familiar. It should always be taken some few minutes *before* food.

5thly. *Diaphoretics.*—These may be administered in conjunction with opium. The suppressed function of the skin is so very evident in all cases of diabetes—becoming harsh, wrinkled, and furfuraceous, patients seldom perspiring, and relief being always apparent so soon as any moisture is obtained on the surface—that remedies which excite or assist in promoting cutaneous excretion are always more or less indicated. Opium itself tends to promote diaphoresis, even when given alone, and its action in this respect may be much increased by combining it with antimonials. Flannel clothing should be strictly enjoined. Several of these cases illustrate the advantage of warm baths in conjunction with these agents.

6thly. *Ammonia and Alkalies.*—The testimony of almost all writers on this disease is in favour of the remedial power of alkalies, particularly of the carbonate of ammonia; and the cases just detailed corroborate the opinions of the most experienced physicians on their efficacy. The fifth case presents the most satisfactory proofs of this plan of treatment, as the patient left the hospital temporarily cured. Of the mode of action of alkalies in this disease, little is known beyond what is hypothetical. Mialhe states that the blood in diabetes is deficient in alkaline salts; and he affirms that the ultimate conversion of the

sugar formed ont of the food, into products capable of being eliminated by the respiratory function, is not effected in consequence of the deficiency. To supply this defect should be the leading principle in the treatment of glucosuria. Whether we adopt this theory or not, the fact remains indisputable, that a larger amount of relief is obtained by a steady and persevering use of ammonia and alkaline salts, than can be procured by any other class of remedies. However, to render them efficient, a well-regulated diet must be rigidly followed, and this should be limited as much as possible to animal or nitrogenous food. In the opinion of Bouchardat, clothing ranks next to diet. Moreover, the intelligent co-operation of the patient is absolutely necessary; for, unless he can be made to understand and enter into the object for which so strict a diet is prescribed, the effects of the alkaline plan of treatment will prove uncertain and unsatisfactory. The progress of cases in private practice is, for the most part, always more satisfactory than among hospital patients, principally for this reason—that intelligence lends force to the efforts of self-denial, and develops a more powerful control over the appetites and habits. The less educated are but little inclined to abstain even from things which they know to be positively injurious, and they with difficulty can be brought to comprehend the necessity for refraining from bread and vegetables, which their necessities have always taught them to be the staple articles of their food.

I cannot take leave of this subject of diabetes, without referring to Dr. Hassall's very valuable paper, in the *Medico-Chirurgical Transactions*, on the "Development of Torulæ in the Urine." When sugar is present in urine in smaller quantities than can be detected by the action of chemical reagents, he has shown that the sporules of the sugar fungus, or even a higher stage of development, may be readily detected by the microscope.

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20. *Treatment of Diabetes.*—Dr. H. Bence Jones, in a clinical lecture (*Med. Times and Gaz.* Feb. 4, 1854) makes the following remarks on this subject: "M. Bouchardat has long recommended claret in this disease, and to the amount of two bottles even in the day. Dr. Pront used to permit his patients to take porter. Being desirous of determining which of these directions was to be preferred, I made some experiments regarding the amount of saccharine matter and acid in wine and beer. I have come to the conclusion, that claret is usually perfectly free from all saccharine matter. The same may be said of Burgundy, Rhine wine, and Moselle wine. Very rarely, indeed, a sherry may be met with which contains no sugar, but generally sherry, port, Madeira, Marsala, contain amounts of sugar varying from 2 grains to 34 grains to the ounce. The best porter gave me from 23 grains to 40 grains of saccharine matter to the ounce; the best stout, from 45 grains to 64 grains; the best bitter ale, from 14 grains to 130 grains to the ounce. Hence it appears that claret will not increase the sugar in the urine, while porter will do so considerably. Direct experiments with diabetic urine has also proved the same fact.

"Spirits, as brandy, whiskey, rum, usually contain no traces of sugar, and hence they may be prescribed for diabetic patients.

"M. Bouchardat, who has seen more of this disease than any one, says that milk is not allowable. The most careful experiments lead me to the opinion that milk scarcely increases the sugar in the urine, even when it is the sole article of diet."

It is most probable that milk-sugar is not easily converted into glucose in the human body. I have, therefore, constantly permitted it to be taken by diabetic patients. It is apt to give rise to constipation, and this has been best obviated by taking an equal quantity of finid magnesia with the milk in the morning.

One of the terminations of diabetes is by phthisis, and on this account, as well for the emaciation, Dr. Jones was led to prescribe cod-liver oil. To a young woman in St. George's Hospital he gave an ounce daily for three months. In this time she gained eleven pounds in weight. Her thirst so diminished that she passed only two and a half pints of urine in twenty-four hours, instead of twelve pints.

"A man, 40 years old, came into the hospital, passing seven pints of urine in

twenty-four hours. He was put on cod-liver oil, one and a half ounce in the day, with a drachm of liquor potassæ. In the first fortnight he lost four pounds and a half. He then took three ounces of oil in the day, with two drachms of liquor potassæ, and in a fortnight he had gained eight pounds. The quantity of urine was reduced to three pints. At the end of five weeks from his admission, he went out at his own request, saying that he was stronger than he had been for eight months, and that he was quite well. The urine still contained a small quantity of sugar."

An enormous amount of cod-liver oil may be taken in diabetes; thus, one of Dr. Jones's patients took, in five weeks, eight pints, fourteen and a half ounces.

On first entering hospital, this patient lost eight pounds in weight; while taking the oil in large quantities, he regained this and one pound more. The urine, with the diet, decreased from five pints, specific gravity 1040, to two and a half pints, specific gravity 1032. The sugar never disappeared from the urine.

Dr. Jones has tried various specifics that have been from time to time proposed. Permanganate of potassa, rennet, so called pepsin, arsenic, electricity, Vichy water, creasote, opium, bark, iron, mineral acids, alkalies, and many others. Hitherto, the search for a specific has only proved that none is yet known to exist.

"Still," he says, "when we look at the morbid anatomy, when minute microscopical examination can give no clue to the seat of the disease, when it pronounces that the stomach[1] and viscera are healthy, when it indicates that a functional error has ended life, we are led to hope that further investigation (some remarkable experiments have lately been published by Dr. Harley on the artificial production of diabetes in animals by the action of stimulants injected into the vena portæ) may lead to the perfect theory of the disease, and by this to the radical cure, instead of the palliative treatment, of this most interesting disorder."

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21. *Dropsy in Relation to Treatment.*—Dr. Barclay read a paper on this subject before the Western Medical and Surgical Society, January 20, 1854. He commenced by alluding to the high mortality of this disease, and stated that the only disease which at all approached it in this respect was phthisis. He drew his conclusions, and carefully illustrated his views, from the Medical Registries in St. George's Hospital during the years 1851–52. He then restricted the term dropsy to anasarca and ascites, considering that as hydrothorax, hydrocephalus, &c., when not presenting themselves as mere isolated portions of general dropsy, are practically found only as the result of inflammation, they should be classed accordingly. Although the distinction between anasarca and ascites is generally clear, yet in many cases both forms are present, but a little care will generally discern the primary form. The morbid states giving rise to ascites are much more fatal than those associated with anasarca, more than two-thirds of those admitted with the latter form being discharged from the hospital cured or relieved, while less than one-third of those affected with ascites reap the like benefits; but here we should bear in mind that many anasarcous patients return again and again to the hospital to be relieved of the same set of symptoms. Though the actual frequency of, and, consequently, the actual number of deaths from, anasarca is far greater than from ascites, yet the ratio of mortality in the latter form is exactly double that in the former. With regard to anasarca, though by far the greater number of cases are associated with disease of either kidney or heart, yet certain cases will compel us to attribute the disease to some other cause. During the two years alluded to, nearly one-fourth of these cases could not be accounted for. The most frequent association of this disease is disease of the kidney, with or without disease of the heart; next comes disease of the heart itself. But though these lesions are apparently so evident a cause for serous effusion,

[1] My friend, Dr. Handfield Jones, has lately examined minutely for me the stomach of a patient of mine who died of diabetes, in St. George's Hospital. It appeared to be healthy.

yet, upon further analysis of these cases, there will be found by no means such a direct connection between the disease and symptom, except where both organs were implicated. This assertion is borne out by the fact that, in the two years before mentioned, but few cases of diseased kidney, and still fewer of diseased heart, presented no other malady of sufficient importance to find a place in the register of disease; and to every one conversant with disease, the pale face of albuminuria, and the dusky hue of impeded circulation, point out something beyond the mere change of structure—some change in the blood itself—to be one of the necessary associations of dropsy. We found also that 63 per cent. of the patients labouring under disease of the kidney, and 42 per cent. of those with disease of the heart, have at the same time been affected with anasarca, and that, in some cases, the only other complication found was bronchitis with emphysema. All which facts go to prove that disease of the heart and kidney may go on for years without causing any dropsy, until the mucous membrane of the lungs becomes congested, and that serous accumulation follows. The explanation then is found in the obstruction that takes place in the circulation through the lungs, and secondarily in the effects of a chronic bronchitis on the constitution. Next to bronchitis, phthisis stands as a cause for dropsy, its degree probably being regulated by the amount of night-sweats, which draw off, to a certain extent, the serous accumulations. In other cases, anæmia goes to prove that some state of the blood is an essential element in the occurrence of dropsy.

In regard to cardiac disease, valvular lesion is the most common cause of dropsy, and hypertrophy the least so, which shows that the production of dropsy depends upon some failure of the *vis à tergo*—a view borne out by a careful analysis of the various cases. In mitral disease, the danger does not depend upon the loudness of the murmur, but upon the feebleness of the pulse, and in aortic disease dropsy seldom occurs until regurgitation is established. An increased circulation alone, too, is rarely a cause of dropsy, unless some obstruction exists to the circulation of the blood, or there be an abnormal tendency to transudation of serum. Bronchitis, whether due to congestion of the lungs, from mitral regurgitation, or from exposure to cold, is one of the diseases which act in this manner. A similar (but a more fatal) result is seen in obstruction to the circulation through the liver, and in all these cases the other causes, which of themselves originate dropsy, may come into play. With regard to valvular disease, we must bear in mind its detection at an early period, while alteration of the size of the heart only becomes manifest after it has acquired a certain degree of intensity, which fact, though it may have much effect upon the numerical relations of the lesions, still is of little importance, as the dropsy never occurs in an early stage of either form of disease. He then remarked—

1. That a systolic murmur may coexist with dropsy, and yet have nothing to do with its production, the cause being simply an anæmic condition of body.
2. That hypertrophy of the heart may be masked by emphysematous lungs, leading one to the supposition that either atrophy or dilatation of that organ existed.
3. That a mitral murmur may be covered by a turbulent action of the heart.
4. That cases occur in which regurgitation through the mitral valves depends upon hypertrophy, a condition leading to no error, as the results are the same whatever the cause of the regurgitation.

The relation of kidney disease to dropsy was then discussed, in which he stated that each stage of the disease was marked by a peculiar state of the urine. In the early stage, the urine is generally clear and free from albumen, though this condition of the secretion sometimes is found in advanced stages of the same disease, which must make us careful in our examinations of the urine, and in forming our suspicions as to the degree of renal change. In the congestive stage, albumen is present, and in acute cases of dropsy, as after scarlatina, it is found in small quantities only in connection with an abundant supply of lithates. In the hemorrhagic stage, the albumen is most abundant, but will be found to bear no relation to the blood passed. Diseased kidney acts in the production of dropsy in two ways—by suppression of urine, and by causing a drain of

albumen and salts from the body, in consequence of which the blood becomes impoverished, and, when disease of the heart is present, it is not difficult to see this morbid state act with increased energy in company with albuminuria. In ascites there is more obscurity, and though the dropsy may arise from obstructed circulation through the liver, it may also happen if the mutual balance between absorption and secretion of the peritoneal surface be destroyed. But the dropsy may be due to some general disease of the system, and be associated with anasarca, in which case some distinct cause will be found for the latter. A diseased state of the peritoneum, including inflammation and malignant conditions of that membrane, may also cause ascites, and, as either may be associated with renal or cardiac disease, it is clear that all such cases are connected with and dependent on some obstruction to the onward current of the blood. As dropsy seldom depends upon the morbid state of any organ alone, but generally in connection with some functional disturbance of it for the time being, these superadded causes are amenable to treatment, though the original one may not be. In simple, uncomplicated anasarca (as after scarlatina) we have simply to counteract the suppression of urine, but in other cases we must improve the tonicity of the blood and system generally. When the kidneys are congested, and effusion is an immediate result, we should use the intestines and the skin, as our channels for the discharge of the serum, rather than the kidneys. In complicated cases, we often have irritation to soothe, and inflammation to subdue, before the dropsy be attacked. In chronic bronchitis, in connection with these cases, we must attend to the general health, rather than use expectorants. The heart must be modified by digitalis, and the blood improved by iron, and the kidneys excited by vegetable salines and buchu, rather than by more powerful diuretics. Purgatives are doubtful remedies, and promise most good in ascites.

The discussion which followed embraced the subject of acupuncture in cases of dropsy, which was strongly recommended by some members present.—*Lancet*, Jan. 28, 1854.

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22. *Hypertrophy of the Spleen.*—Prof. Christiansen, of Copenhagen considers splenic enlargement to be caused by such mechanical obstacles as impede the return of the venous blood to the heart, and by such dyscrasic states of the blood as give a tendency to hyperæmia. He has frequently met with it in cases where there was hypertrophy of the right ventricle of the heart. In these circumstances, he says, so called "infarctions," or capillary apoplexies, are not uncommon, presenting, in its substance, clots which, at first, are firm with well-defined borders, and afterwards become decolorized and softened. Hypertrophy of the spleen also occurs in cases where there exists any impediment to the circulation through the vena cava; where there is constriction or impermeability of the vena portæ; and where there has been suppression of the menstrual or hemorrhoidal evacuations. In the blood-diseases, as typhus, cholera, pyæmia, and delirium tremens, he says, the organ is frequently, not only enlarged, but also altered in structure. He has never seen enlargement from intermittent fever, as this disease is extremely rare in Copenhagen, but he believes it to be due to the repeated hyperæmic condition of the organ. He has frequently observed splenic hypertrophy occurring in cases of Bright's disease, so that the organ weighed from ʒxvi to ʒxx. Its condition, in these cases, resembles that observed in it by Rokitansky after intermittent; *i. e.* it is so hard and brittle that it can easily be cut into thin slices or broken into fragments. It presents, on section, a coarse granular structure, nodules the size of pepper-corns being imbedded in its substance; it is also of a bluish-red or dark violet colour, which becomes bright red on exposure to the air. Its form is somewhat changed, the inner border being broader and firmer than ordinary. The fibrous capsule is not firmer than usual, and there are no morbid adhesions to the peritoneum, although these conditions frequently are found in the enlargement following intermittent. The author thinks this condition of the spleen arises from a deposition of albumen in the substance of the organ, and surmises that, after the absorption of the watery elements, the

albumen remains behind in the Malpighian bodies, in a solid form, occasioning, by their dilatation, the granular structure alluded to.

Prof. Christiansen has found many pathological lesions of the thoracic and abdominal viscera existing in connection with enlarged spleen. Thus, he has found the inferior and posterior parts of the lungs infiltrated with dark-coloured blood; inhibition of the heart, especially of the inner wall of the right ventricle, and accumulations within it of grumous blood; distensions of the veins surrounding the Malpighian pyramids of the kidneys; sanguineous effusions into the peritoneal cavity, and into the external cellular tissues. In *all* cases, he found blood extravasated into the intestinal canal, resulting from a diphtheritic inflammation of the mucous membrane, which had caused, during life, bloody evacuations with tormina and tenesmus. As regards *treatment*, he admits that very little is known. He has seen one case do well under the use of *plumbi acetas*. Where the patient's strength will bear them, strong counter-irritants, as moxa, caustic, and the actual cautery, may be tried. In the hypertrophy following intermittent, quinia seems to him the best remedy for the restoration of the general health.—*Monthly Journ. Med. Sci.* Jan. 1854, from *Schmidt's Jahrbücher*, Bd. 79.

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23. *Sulphate of Manganese in Hypertrophy of the Spleen.*—Prof. Gintrac recommends this salt as a substitute for, and adjuvant of chalybeate remedies, for improving the condition of the blood in anæmic patients. He relates an instance of ascites, where œdema, with great splenic enlargement, formed the sequelæ of intermittent fever, in which 1½ grains (0.10 gramme) of this drug, given twice daily in the form of pill, produced a complete cure.—*L'Union Médicale*, lxix. 1853.

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24. *Observations on a Case of Fecal Obstruction.* By R. Christison, M. D., Prof. of Mat. Med. and Clin. Med. in Univ. of Edinburgh.—Some persons have such a horror of aperient medicines, that they cannot persuade themselves to take one oftener than twice a week, or once a week only. And, nevertheless, you will sometimes see them keep their health, and maintain their bodily comfort. But, for the most part, you will find it a sound general rule, to insist with such people on a more liberal use of aperients; and the great variety we now possess of convenient compound aperients, will enable you to find some one suitable to the constitution of any body, and reconcilable with almost any prejudices.

There are others whose prejudices are unconquerable, and who will not take laxatives at all, though their bowels do not move of themselves above once a week, if even so often. And it is right you should be aware that this apparently most unnatural and preposterous habit is not of a necessity, and in all cases, a habit injurious to health. You will occasionally meet with men so singularly constituted, that they enjoy sound health upon a weekly stool. And, indeed, all perhaps that can be well said of them is, that they are rather to be envied by their fellow-creatures, for an endowment which must be frequently found very convenient. But such people sometimes get into difficulties. About two years ago, a gentleman from Wigtonshire, a landed proprietor, attached to agricultural pursuits, and, therefore, never without free air and exercise, consulted me about a serious difference he had with his medical advisers in the country. Having recently recovered under their care from a severe pneumonia, they made the not unreasonable stipulation, when they ceased to attend him, that he should take a laxative every three days, to correct a constipated habit. To this he demurred, on the very natural ground that, until his late illness, he had enjoyed excellent health for sixty years, although his bowels had been habitually moved, all his life, only once a fortnight. This gentleman had made a journey of one hundred and twenty miles for no other reason than to get the question between him and his physicians settled by some competent authority in therapeutics; and, in referring to me for the purpose, he mentioned, for my further guidance, that a neighbouring gentleman of his acquaintance, of the age of seventy, had told him that he too had immemorially evacuated his bowels only every alternate Sunday, without being able to recol-

lect having ever had an illness. It was scarcely to be wondered at that their common experience half inclined them to think that their constitution was the natural and patriarchal one.

Our hospital patient seems to have been of the same opinion with these elderly agriculturists. Like them, he has had some experience of life, being now seventy-four. Like them, too, he has enjoyed singularly good health, being a surprisingly fresh-looking man for his years, notwithstanding that he had passed through severe trials in early life. As a soldier in India, he sustained, when very young, a spear wound of the leg, where he has had, almost ever since, a small open ulcer, which he ascribes to the spear having been poisoned. In the Spanish war he was wounded at the battle of Barossa, in 1811. There are now evident marks of the bullet having passed through him from the left groin, piercing the blade of the os *ilium* in its course. For two years he lay in hospital; and recovering with a shortened limb and stiff joint, he was invalided on a pension of one and sixpence halfpenny, as a wounded sergeant and soldier of twenty-one years' service. This he has now enjoyed for forty-one years. Nor has his wound much incapacitated him; because, for many years, and down to his present illness, he had actually worked as a railway labourer. During this long period, he lived on his pension and wages in great comfort and sound health, until, on lately leaving off work, he became liable to constipation. At first, his bowels were moved every other day in general, and afterwards seldom oftener than once a week, unless he took physic, which he did seldom. At last, the action of the bowels seemed to cease altogether, and he went for four weeks without any evacuation, even though he made occasional trial of a laxative. At the end of the fourth week, a strong dose brought away a great accumulation. After that he had no further evacuation, and it is now three weeks ago. He had again made a few gentle attempts to assist nature; but he did not much insist upon this, because his lodging-house had no convenience, as he said, for a man under physic. During the entire period of seven weeks, he assures us he had no pain or other suffering whatever. But at last his belly got very large, so that his trousers would not button over it; and on this account he applied here for relief, and not for any actual illness.

On admission, he had no appearance of any suffering. He seemed a fresh, vigorous, active, cheerful man. He took his food tolerably well; the pulse was natural; and the tongue was only a little furred. "The abdomen," to quote the hospital journal, "is much distended, especially in the iliac regions, where there are two large prominent swellings projecting laterally, so that the crest of the ilium on each side is quite sunk, the tumours projecting much beyond the bones. There are different irregular swellings at different parts of the abdomen, especially in the track of the colon. Over some of these points percussion is quite dull; over others it is tympanitic. The circumference of the abdomen, where largest, is 39½ inches."

As it was judged unsafe to give him active purgatives by the mouth at once, in case of the great gut being firmly obstructed with hardened feces, a turpentine injection was properly administered by the clinical clerk in charge of him. The result was "a prodigious discharge of fecal matter of all degrees of consistence," much of it composed of very hard scybala. A dose of jalap and calomel given immediately after this forerunner, brought away also a great mass of feculent matter. Next day, being quite well, but with the abdomen as large as ever, another similar dose occasioned only an ordinary discharge. On the third day, the swelling being equally great, though now quite uniform, and everywhere clear on percussion, I gave him what has always appeared to me the most effectual of all safe energetic purgatives in cases of simple fecal accumulation—two drachms of oil of turpentine with six drachms of castor-oil, in the form of emulsion. But he had only two scanty loose discharges, and the belly continued in the same state, presenting especially the singular enlargement and overlapping of the iliac regions.

It was now apparent that, owing to long-continuous distension of the bowels with feces and gases, their muscular coat had lost its tone, in some regions at least, and especially in the cæcum and descending colon. It was then pro-

posed hy the clinical clerk to resort to galvanism for relief from this paralytic condition; which suggestion was at once ndopted. It is more than twenty-five years since galvanism was recommended as n useful remedy in cases of obstinate constipation; nnd we can easily see that it mny be useful, and upon what principle it acts. The first way of using it was hy directing the galvanic current from the month to the anns; and in that way it seems to have been most effectual and prompt in some cases. But its action is thus rather painful; and ulterior observation has shown that passing the current in various directions through the ahdomen itself may he sufficient. This remedy seemed even more applicable to the etato of our patient after the bowels had been cleared out. And accordingly it acted with wonderful energy and success. After the current had been passed for some time from before hnekwards, as well as from side to side, he had in nn hour n copious evaenation, in three hours another, and next morning a third. Flatus was also disehnrged in nbundance; and the nhdomen fell greatly, 'hut still not completely, nhove all in the iliac regions. The pain of the galvanic action, however, had been so great, that the patient hegged to have n day'e respite. In fact, he declared his willingness, and confirmed it with an oath, that he would rather he shot again than suhmit to he galvanized a second time. On the second morning, however, the remedy was applied more gently, and on two mornings subsequently. He had n daily discharge from his howele, and sometimes two. The ahdomen had now hccome naturnl in eizo and form. Since then he has had a natural evacuation every morning without nid from either laxative or galvaniem. He was dismissed after heing fourteen daye in hospital.

This is a case a little out of the common run, but not without instruction; and I have, therefore, thonght it well to hring the chief circumstances under your notice. It is an excellent illnstration of the influence exerted by galvanism over the animal functions. It appears to me to hold out a prohability that the eame remedy may prove serviceable in restoring the tone of the intestinal muscles, in other forms of inconvenient chronic flatulent distension of the ahdomen.—*Month. Journ. Med. Sci.* Sept. 1853.

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25. *Pemphigus.*—The *Med. Times and Gaz.* (Feb. 11, 1854) contains n report of eighteen cases of this rather rare disease; nnd from a consideration of which the reporter drawe the following conclueione:—

1. That pemphigns is a diseaso affecting all periods of life; especially liable to occur hetween the ngee of four and twenty-five.
2. That, like many other skin diseases, it very frequently recure in thoso wbo have once heen its snhjects.
3. That it usually affects those only of a fair complexion nnd thin ekin. (To thie we find no exception among tho cases in which noto has been made as to the complexion.)
4. That it is rather more common in the male than the female sex (10 to 8).
5. That its eevero chronic and relapsing forms are more frequent than tho benign and transient.
6. That the parts most liable to he affected are the legs, arms, genitals, abdomen; eeldom the face, nnd very rarely the hairy ecalp.
7. That the serum of the hullæ is almost always alkaline. (It was tested in most of the eases, and no exception occurred; the alkalinity was generally very great.)
8. That it is very rarely n symptom of congenital, and perhape never of acquired syphilis.
9. That it occure commonly to those of good physical conformation, but is mostly coincident with temporary cachexia.
10. That it is not very markedly influneed hy season.
11. That its idiopathic infantile form is a very mild disease, and will nsually recover spontaneously.
12. That it is not, as n rnle, associated with any particnlar form of cachexia. (In but two of the ahove cases were the patients scrofulous; none were known to bo rheumatic, or to have had egue; dyspepsia was an attendant in but few.)

13. That the general indications are for the use of tonic regimen and generous diet (Cases 13 and 14); but that these will not suffice for the cure (Cases 3, 4, and 14).

14. That arsenic may be esteemed an almost specific remedy, even in the worst class of cases (Cases 2, 3, 4, 14, &c. &c.). [The careful perusal of the preceding series will, we think, convince the reader that this proposition is not too strongly put. Many of the patients were, when admitted under Mr. Startin's care, in a truly deplorable condition; the disease had produced extreme irritation, it had lasted for many months or years, it had resisted all sorts of treatment previously. In every instance but two (Cases 3 and 15) the most marked benefit attended the adoption of the arsenical plan.]

15. That arsenic does not merely repress the eruption, but remedies the unknown constitutional cause on which that symptom depends, always very much benefiting the general health of the patient.

16. That arsenic does not prevent the liability to subsequent attacks, but that such attacks are always much less severe than the original one, and tend, if treated by the same remedy, to diminish in intensity on each successive occasion.

17. That the early age of the patient does not in the least forbid resort to the arsenical treatment.

Those acquainted with the literature of this subject will observe, that the above conclusions differ considerably in some respects from the statements to be found in books. The disease itself may probably differ somewhat in London and on the Continent. Gilibert, whose monograph on it is the best extant, appears, for instance, to have met with but three examples of chronic pemphigus, all of them in elderly and enfeebled subjects. A current opinion has accordingly prevailed, that that form is almost peculiar to the aged, while the fact is, as we have above shown, that in London, at any rate, the young are much more frequently its subjects. Cases of relapsing pemphigus, or those in which the disease has extended over many years, do not appear to have attracted much notice from previous writers. Pemphigus is not known to prevail endemically in any part of England; on the contrary, it seems to be about equally scattered over all districts. Two cases came under our notice in York some years ago, and during the last summer we saw a very well-marked case in the Leeds Infirmary, under the care of Mr. Samuel Hey. Mr. Hey informed us that the disease was very rare in Leeds, and that he had, during many years, seen but that one example. There does not appear to be much foundation for the opinion that the disease prevails most in damp localities, and on the banks of rivers. Such a notion is supported by but a small proportion of the above cases. The preceding series probably scarcely presents the benign and chronic forms in their due proportions as to frequency of occurrence, since cases of the former are often of so transient a character that they never come under care at hospitals. With regard to the treatment of the chronic form by arsenic, we have recorded *all* that we have seen. A case has been mentioned to us, however, by a gentleman of very careful observation, in which the arsenic is stated to have quite failed to cure the disease, while it seriously interfered with the patient's (a child) health. We have not obtained particulars as to administration, &c.

The disease known in London as rupia escharotica, but described by Dr. Corrigan as a form of infantile pemphigus, has been altogether omitted in the above, and is reserved for a future report. Whatever may be said of its primary stage, its aftercourse has no sort of resemblance to pemphigus.

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26. *Ringworm cured by the local application of Sulphurous Acid.*—Dr. Jenner, in a clinical lecture (*Med. Times and Gaz.* Aug. 20, 1853), relates a case of ringworm which he successfully treated by a lotion of sulphurous acid. The lotion is made by passing a stream of sulphurous acid through water until the latter is saturated; and to two ounces of this solution is added six ounces of water. Lint wetted with this is applied to the ringworm, and this is covered with a piece of oil-silk.

27. *The Indian Plague and the Black Death.*—Dr. August Hirsch, of Dantzic, communicated a very interesting paper on this subject to the Epidemiological Society (Dec. 5, 1853). The author commenced by stating that, in the whole history of epidemics, there are few epochs more interesting than that of the fourth decennium of our century; for then, within the compass of a few years, we find many of the most important diseases spread epidemically over the globe. These were preceded by agues, which prevailed at the close of the third decennium, and by the influenzas of the years 1831–3. Cholera, which in 1823 had stopped short on reaching the frontier of Europe, overspread with the force of a torrent the Russian empire, and in 1831 entered Germany, where, in the southern parts of the kingdom, it was soon followed by typhoid fever and dysentery. At the same period "sweat fever" appeared in France and Italy, and, for the first time, "typhus cerebralis" was propagated epidemically. In North America cholera, typhus, and yellow fever raged. Turkey, Western Asia, Egypt, and the greater part of North Africa, were ravaged by typhoid fever and Oriental plague; and it was just at that period that a disease of a new and most malignant character broke out in the northwest part of Hindostan. Research among the archives of the Medical Board, however, made it evident that that same disease prevailed some years before in those regions; but the attention given to it had subsided soon after the epidemic ceased. The author considers the disease in question to have been a very decided plague, specifically modified; and that, in order to distinguish it from the Oriental plague, it may justly be denominated the "Indian Plague." The first historical report of the outbreak of the Indian plague dates from the year 1815, in the provinces of Kutch and Guzerat, which in the previous year had suffered from terrible famine. Neither the origin nor the course of the epidemic could be distinctly traced, but there is no doubt that the disease already, in May, 1815, had spread over some parts of Kutch, and the district of Wagoor, that it raged in these territories until the following year, and made great havoc among the inhabitants. At the same time the epidemic appeared in Kattywar, whence it spread to Scinde, and in November it reached Hyderabad, where from sixty to seventy persons daily fell victims to the plague. The epidemic entered the northeastern district of Guzerat, in the beginning of 1817, and abated in the fall of the year. With the rainy season of 1819 it burst forth with new vigour, and overspreading the territory which had suffered during the previous year, reached the northern part of Guzerat, and in the east the Zillah of Ahmedabad. With the close of 1821 the epidemic everywhere disappeared; and, but for the remark of Dr. Rankine, that the plague had been observed, in 1823, in the mountainous territory of Kamoon, we have no information of its reappearance until 1836, when it broke out with great malignity in a country far removed from that above mentioned. It was then that the disease for the first time attracted general attention, and gave rise to scientific inquiries, and the adoption of sanitary measures. The Radjpootana States were the scene of the ravages of this epidemic; and as the first report of the disease came from Pali, in the province of Marwar, it has obtained the name of the Pali plague, although it is anything but certain that the epidemic originated in that place, for it also raged at the same time (July, 1836) in other districts of that province. After having traversed the greater part of Marwar, the disease passed the chain of hills separating the eastern borders of this province from Meiwar, overspread that country, and afterwards the district of Adjmer. Early in 1837, when the epidemic in Marwar had nearly ceased, it appeared in Misserabad, and declined with the rainy season. At the close of 1837, it again invaded Marwar, especially the town of Pali, and continued till the spring of the following year. Since that time, up to 1850, there was no further report of the prevalence of the malady. It was in this year that a fresh outburst occurred at Ghuravhal and Kamorn, in the Himalayan territory. Dr. Hirseh gives a very minute and graphic description of the mode of invasion, and of the general symptoms of the disease. The disease, although a bubonic plague, was distinguishable from the Oriental plague by an attendant pulmonary affection, with hæmoptoë. The mortality was dreadful; the supposition that it was from 75 to 80 per cent.

of those attacked being by no means exaggerated. In the town of Pali alone, in a population of 20,000 inhabitants, 4,000 persons fell a sacrifice to the plague in the period of seven months. The disease did not appear to be contagious, nor was it at all influenced by season. In the concluding portion of the paper, which indicated much learning, labour, and deep research into the writings of ancient as well as modern authorities, the author adduced strong evidence as to the identity of the Indian plague with the black death of the fourteenth century—that terrible epidemic which fills one of the darkest pages in the history of mankind.—*Med. Times and Gaz.* Dec. 10, 1853.

28. *On the Sanitary Influence of Purulent Discharges.*—Mr. Roger Harrison read a paper on this subject before the Medical Society of London (Jan. 14, 1854). He began by apologizing for the rather vague title of his paper, vague inasmuch as his remarks would necessarily (on account of time) permit him only more especially to allude to one of the forms of the salutary influence of purulent discharge, viz: the fistula in ano, which frequently accompanies diseased visceral organs; and, by cases recited, he showed how spontaneous fistula in ano pointed to some more specific manifestations of the laws regulating the production of pus in parts remote from the seat of the disease; as well as that he believed the fistula occasionally preceded the development of pulmonary consumption. In the course of his observations he drew attention to the fact, that, in spite of the recommendations of Sir B. Brodie, to ascertain the state of the person's lungs, &c. before operating in this class of disease, the reverse still obtains, and the operation was yet persisted in at the premature cost of the patient's life. He believed that, in many cases, while the purulent discharge was constantly taking place from the rectum, the true disease was masked, and that, so long as a drain was kept up spontaneously, vital organs were relieved, and life sustained; but that, immediately on the cessation of these habituated discharges, the seeds of phthisical disease, which were but slumbering in inactivity, were forced into existence, and the patient sank under their destructive influence. He used the word spontaneous strictly, inasmuch as he attributed not the same amount of prophylaxis to artificial issues, or setons, &c., although he was aware the latter occasionally were of temporary benefit. The author, in the course of his paper, combated the view taken by Andral and Louis, that fistula in ano and phthisis were not concurrent in more than one of the former, in 800 cases of the latter disease, and did not attach much accuracy to the statements of the French physiologists; and he quoted passages from Pott and Brodie, as well as his own experience, to show that the practice of English surgeons led them to lay down strict rules of treatment in cases of fistula in ano, complicated with pulmonary diseases. He further expressed his belief in the truth of his position by contemplating the physiology of suppuration, as exhibited in the exanthemata of children—(all of which he believed to be blood diseases)—in the glandular abscesses of boyhood. The almost immunity of it at puberty—the recurrence of it again in attained manhood, when nature, ever fruitful and bountiful, makes a contingent charge upon less important parts to carry off effete matter which may have accumulated in the blood. He then proceeded to deduce from the cases read, points as to the physiology of diseased action in the human body, which he considered entirely dependent on individual constitution. It appeared plain to him, that the human frame was obnoxious to two distinct actions going on in the body at one and the same time, and that the disease of which the constitution is most susceptible was not at all times the one in the ascendent, but was often, by an adventitious discharge (such as fistula) kept in the dark, and diseased vitality of the blood thrown off to the relief of internal organs. This position, he maintained, was evidenced by the experiments of Cruveilhier and Blandin, and the writings of Carswell and Pott, of Wilson, and of Cooper. He alluded, in the course of his remarks, to the prevalence of boils and carbuncles as confirmatory of a diseased action in one functional organ set up to relieve the blood of its materies morbi, engendered by atmospheric or other influences. He touched upon the histology of pus and its formation, disagreeing with Dr. Lehert, of

Vaud, who could discover no similarity between concrete pus and tubercle, he believing the difference in size of the two fully accounting for the small difference in shape. He quite coincided with Dupuytren as to the formation of pus being the result of the wrecks of solids, of inflamed organs, and of the elements of the blood, which have entered into new combinations; and concluded his paper by drawing the attention of the Society to the plain plan of practice alone necessary in the treatment of those complicated diseases of tuberculosis and fistula, and decrying all surgical interference in such cases.

Dr. Ogier Ward, in support of the author's opinions, mentioned the particulars of the case of a young lady who had been afflicted with ulceration of the cervical gland, general debility, and threatenings of phthisis. She was directed to visit Hastings; and, so long as she did so, and the glands continued to suppurate, phthisis did not appear; but, having at length much improved in health, and induced a tendency to the healing of the suppurating glands, the patient declined to undertake her annual journey, and died during the next spring. Dr. Ward, as an old pupil of M. Louis, was desirous to reconcile the contrary statements made by that distinguished physician; and the author being assured that all the statements were made in good faith, and thought that he could do so by stating that the great mass of M. Louis's cases occurred before their thirtieth year, whereas fistula usually attacks persons who have passed that period of life. He thought, also, that fistula would be less frequent in France than in England, on account of the prejudice existing in the former country to hard seats.

Mr. Hancock considered that the author's proposition was not a universal one, and cited proofs, that in certain classes of cases the healing of fistulas and abscesses produces unmixed good. He laid down the rule, that whenever the pectoral and general symptoms had preceded the occurrence of fistula, it would be improper to operate; but, when general symptoms follow the abscess, the operation is beneficial. He then referred to the case of a gentleman who was presumed to be in the last stage of phthisis; and, in addition, was afflicted with fistula in ano, who had been advised to submit to the introduction of bougies, with a view to the consolidation of the strictures, but not to permit the division of the sphincter. Mr. Hancock subsequently divided the parts, and found a large purulent cavity existing near to the glutæi muscles, after which the patient became perfectly well. He also referred to numerous cases of abscess caused by scybalæ, or foreign bodies, as bones and coins, which had been cured by operation. Whenever injury to the system results from the operation, he considered it to be due to the irritation set up by the operation, and not to the suppression of the purulent discharge. He criticized the author's term "suppurative abscess," considering that all abscesses are suppurative. He thought it unlikely that the occurrence of gonorrhœa or syphilis would cure consumption.

Mr. Dendy explained that the author had not intended to refer to such abscesses and fistulas as depend upon local causes, but to those only which have essentially a constitutional origin, and he altogether agreed in his opinions. Hippocrates had also observed, that the suppression of purulent discharge is sometimes followed by general distrnhance and by insanity; and this he (Mr. Dendy) had seen confirmed again and again at the Infirmary for Children. He had no doubt but that gonorrhœa would be a good prophylactic in the cases referred to, but of course would not advise it as a remedy. He then referred to the present epidemic in Omer Pacha's army, as illustrative of the constitutional origin and emunctory character of collections of purulent matter.

Mr. Harrison stated that he wished it to be understood distinctly, that he had never suggested the propriety of obtaining a gonorrhœa or syphilis, either as prophylactic or curative of phthisis.—*Med. Times and Gaz.* Jan. 21, 1854.